

A NEW HYDROMETRID GENUS FROM HONDURAS
(HEMIPTERA).¹

BY ROLAND F. HUSSEY, New York City.

During the spring of 1923, under the auspices of the United Fruit Company, Mr. T. H. Hubbell made an extensive collection of insects in various localities on the Atlantic slope of Honduras. A considerable portion of this material, which is now deposited in the Museum of Zoology of the University of Michigan, was secured in the Guaimas district of the Tela division, located about 65 kilometers up the Ulua River valley from Tela. Here a large area was being cleared and planted, and the original dense forest had been removed and the land burned over once or twice for a distance of about a kilometer on all sides of the camp at Farm 26, which was Mr. Hubbell's headquarters for his work in the Guaimas district.

Mr. Hubbell informs me that this region is nearly level, with little relief, and with only a few streams which run in arroyos cut deeply below the general level of the land. The collecting here was done in the dry season, and the Cabeza de Vaca Creek, which passes near the camp, was reduced to pools of stagnant water, with occasional stretches in which there was a very sluggish flow.

Among the Hemiptera of this collection which have been submitted to me for determination, there is one specimen of a remarkable Hydrometrid, taken at light on the screened window of the barracks at Camp 26. Inasmuch as the windows of this building look toward the Cabeza de Vaca Creek, it is to be presumed that this specimen came from that locality. Through the courtesy of Mr. John R. Johnston, Director of the Agricultural Research Department of the United Fruit Company, I have been authorized to publish its description separately.

Limnobotodes new genus.

Moderately elongate. Head rather slender, less than one and one-half times as long as the pronotum, subcylindrical at the base, swollen beyond the eyes, the swollen portion obo-

¹ Contribution from the Biology Department of the Washington Square College, New York University.

vate (as seen from above); tylus discrete from the frons, narrowed toward its base. Eyes coarsely agglomerate, situated distinctly behind the middle of the head. Antenniferous tubercles lateral, situated at about the middle of the preocular portion of the head, produced externally as a small vertical lamina, truncate at its apex, appearing like a small spine when seen from the dorsal aspect. Antennae 5-segmented, the first segment thickest, fifth longest, second and fourth shortest. Head above with four very slender, more or less flexible, erect hairs, arising each from the center of a small circular non-pigmented area, these areas situated two at the extreme base of the head and two on the posterior portion of the swollen apical portion,² the basal pair situated on small tubercles directed obliquely laterad. Bucculae high, short, entirely concealing the thick basal segment of the rostrum; rostrum with two visible segments, the first one extremely long, slender, the apical one short, attaining the mesosternum. Gular region broadly but shallowly sulcate behind the insertion of the rostrum.

Pronotum scarcely longer than wide, somewhat tumidly convex, provided with a broad flat collar anteriorly; lateral margins subparallel, posterior margin most obsoletely flattened, humeral tubercles distinct but not prominent. Scutellum not visible. Anterior acetabula sub-campanulate, as seen from the side, the apical margin distinctly thickened. Mesosternum rather broadly but shallowly sulcate. Posterior acetabula longest in antero-posterior direction, the coxae inserted ventrally. Odoriferous orifice single, situated in the midventral line at the posterior margin of the metasternum.

Legs mediocre. Coxae of all legs distinctly longer than wide, the posterior pair one-third farther removed from one another than from the sides of the body. Tarsi three-segmented, the basal segment minute, the third segment very shallowly excavated at the apex on the dorsal side and obliquely truncate below. Claws very minute, visible only with the highest power of the binocular microscope, preapical, inserted on the dorsal side of the tarsus, slightly curved (as seen from the side), their convex edges outward, tips hardly projecting beyond the apex of the tarsus.

² In *Hydrometra* the erect hairs are commonly short and arise from minute black pits: there are two pairs of them on the swollen apical part of the head and a dorso-lateral pair near the base. I can find no trace of hairs or ciliiferous areas in *Limnobotodes* corresponding to the most anterior pair in *Hydrometra*.

Abdomen with six ventral segments plus two genital segments (♀) Hemielytra semi-membranous, thicker toward the costal margin, not divided into clavus, corium, and membrane; venation as in *Hydrometra*.

Genotype: *L. paradoxus* n. sp.

***Limnobotodes paradoxus* n. sp.**

Fuscous, head and pronotum somewhat shining, apex of head paler; fifth antennal segment, rostrum, coxae, and trochantera pale yellowish; apex of femora, extreme base and apex of tibiae, and tarsi pale; venter flavo-testaceous, the lateral margin broadly fuscous; hemielytra fuscous, the veins sparsely pilose, centers of the areoles and the entire anal margin, also the apical margin more obscurely, pale. Dorsal parts (except the pronotal collar) and the propleura impunctate, provided with numerous minute black spinules and with erect pubescence in addition. Pronotal collar with a transverse row of coarse punctures behind the middle. Ventral surface of head and thorax, mesopleura and metapleura with numerous shallow foveae, many of which, in the specimen before me, are filled with a white waxy-appearing substance.

Head more than $3\frac{1}{2}$ times as long as its basal width, and about $\frac{2}{7}$ longer than the pronotum, slightly tapering from the base to a point just before the eyes, then rather suddenly swollen for more than half of the preocular length, thence obliquely declivous above and convexly narrowing at the sides toward the apex; tylus transversely depressed near its base; gular surface (as seen from the side) almost straight. Antennal formula, segments I: II: III: IV: V = 8: 3: 8: 3: 9, rather remotely pilose, the apical segments a little more densely so. First visible rostral segment seven times as long as the second, second reaching to the intermediate coxae. Width of interocular space about equal to the diameter of an eye. Distance between anterior pair of ciliiferous spots about equal to the interocular width, that between the posterior pair one-half greater.

Pronotum alutaceous, evenly convex above, anteriorly behind the collar with a deep semi-circular impression with two deep foveae on its anterior margin; posterior margin broadly rounded; lateral margins very feebly convexly rounded. Meso- and metasternum pilose. Hind femora reaching the apex of the sixth ventral segment. Venter densely covered with short appressed pile; sixth ventral segment (♀) feebly produced backward on the median line, forming a short blunt spur at the base of the genital segment.

Length, ♀, 3.3 mm.; humeral width, 0.6 mm.

HONDURAS. Tela: Guaimas district, 8. V. 1923, at light (T. H. Hubbell). Type in the Museum of Zoology of the University of Michigan.

This remarkable form shows at once many points of agreement and of disagreement with *Hydrometra*, the only genus of this family known heretofore. Among the characters which the two genera possess in common may be cited: the venation of the hemielytra; the general structure of the head, subcylindrical at the base and swollen toward the apex; the laterally placed agglomerate eyes, remote from the pronotum; the structure of the rostrum, with its basal segment concealed between the bucculae and the second and third segments fused into one, so that the first visible segment is extremely long; the apically sulcate gula; the paired erect hairs on the head above; the general form of the acetabula and the insertion of the coxae; and the absence of lateral odoriferous orifices upon the metathorax.

Limnobatodes is at once distinguished from *Hydrometra* by its more robust form, the relatively longer swollen portion of the head, the five-segmented antennae, the rostrum reaching to the middle coxae, the number and greater length of the erect hairs of the head, the more coarsely faceted eyes, the pronotum scarcely longer than wide, the small but distinct omphalium, and the pre-apical dorsal insertion of the minute tarsal claws. In the accompanying figure the spinules of the head and pronotum are somewhat too large.

It may be noted here that, contrary to the opinion of Mayer, as reported by Bergroth (1906, Wien. Ent. Zeit., xxv, p. 6), the omphalium of the Gerroids represents the opening of a set of glands which is entirely distinct from those whose orifices are found in the paired lateral or ventro-lateral "ostia odorifera" as in the non-aquatic Hemiptera. The Veliidae possess the paired ostia, and the genus *Velia* has in addition a very distinct omphalium; and in the family Gerridae, though usually the ostia are vestigial and the omphalium quite distinct, the genus *Cylindrostethus* possesses distinct and functional orifices of both sorts. A further account of these glands will appear in another paper.